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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,809	03/22/2004	Sudhir Kumar Madan	TI-36818	9964
23494	7590	02/16/2006	EXAMINER	
TEXAS INSTRUMENTS INCORPORATED P O BOX 655474, M/S 3999 DALLAS, TX 75265			MAI, SON LUU	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

Office Action Summary

Application No.

10/805,809

Applicant(s)

MADAN ET AL.

Examiner

Son L. Mai

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/22/04; 7/30/04; 8/30/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 12-15, 18-22, 24-26, 37 and 38 is/are rejected.
- 7) ☒ Claim(s) 2-11, 16, 17, 23, 27-36, 39 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/22/04; 7/30/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The papers filed 03/22/04; 07/30/04 and 08/30/04 have been received and entered. Accordingly claims 1-40 are pending in the application.

Information Disclosure Statement

2. The information disclosure statement filed 03/22/04 and 07/30/04 have been considered.

Drawings

3. The drawings were received on 08/30/04. These drawings are acceptable.

Specification

4. The disclosure is objected to because of the following informalities: On page 22, lines 8-9, the description does not agree with the drawing of figure 3J. In the figure 3J, wordline activation pulses 113 are applied only during a restore or a write operation, but not during a read operation. Further, these features claimed in claims 15, 24, 25, 37 and 38 are not consistent with drawings. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 12-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 12, the claim recites the limitation "the second plate group" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claims 13-14 are rejected for including the limitation of claim 12.

As to claim 15, it is not clear if "a first voltage" (line 4) is the same voltage as a first voltage in claim 1. If they are the same then "a first voltage" in claim 15 should read --the first voltage--.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1, 15, 18-22, 24-26 and 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishihara et al. (U.S. Patent 6,566,698).

Regarding claim 1, Nishihara teaches a method for accessing ferroelectric memory cells (MC) in a ferroelectric memory device comprising: performing a read, restore, or write operation to access one or more ferroelectric memory cells along a selected wordline in a ferroelectric memory array (figures 12 and 13 show read and

write operations); and activating a non-selected wordline (WL2) while a bitline (BL2) and a plateline (PL2) associated with the ferroelectric memory cells along the non-selected wordline are both substantially at a first voltage ($V_{cc}/2$).

Regarding claim 15, Nishihara teaches the non-selected wordline (WL2) is activated during write operation while the bitline (BL2) and plateline (PL2) associated with the ferroelectric memory cells along the non-selected wordline are both substantially at a first voltage ($V_{cc}/2$).

Regarding claims 18-22, 24-26 and 37-38, they are rejected under 35 U.S.C. 102(e) as being anticipated by Nishihara et al. (U.S. Patent 6,566,698) for claiming substantially the same subject matter as claims 1 and 15.

Allowable Subject Matter

9. Claims 2-11, 16-17, 23, 27-36 and 39-40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claim 12-14 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to teach at least the limitation of claim 2 which calls for the first voltage is ground.

Conclusion

12. The prior art made of record is considered pertinent to applicant's disclosure. Komatsuzaki (U.S. Patent 6873536 B2), Kye (U.S. Patent 6288931 B1), and Kuroda; (U.S. Patent 5550770 A) disclose platelines are grouped together in ferroelectric memory devices.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son L. Mai whose telephone number is 571-272-1786. The examiner can normally be reached on 8am to 6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on 571-272-1852. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

02-01-06



Son L. Mai
Primary Examiner
Art Unit 2827